

PCT09

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/890,811A

DATE: 06/24/2002 TIME: 17:40:08

Input Set : N:\Crf3\Refhold\I890811A.raw
Output Set: N:\CRF3\06242002\I890811A.raw

**ENTERED** 

```
1 <110> APPLICANT: Zhu, Qun
            Famodu, Omolavo O.
     3 <120> TITLE OF INVENTION: SPF1-Related Transcription Factors
     4 <130> FILE REFERENCE: BB1436 PCT
C--> 5 <140> CURRENT APPLICATION NUMBER: US/09/890,811A
     6 <141> CURRENT FILING DATE: 2002-05-07
     7 <150> PRIOR APPLICATION NUMBER: 60/174325
     8 <151> PRIOR FILING DATE: 2000-01-04
     9 <160> NUMBER OF SEQ ID NOS: 14
    10 <170> SOFTWARE: Microsoft Office 97
    12 <210> SEQ ID NO: 1
    13 <211> LENGTH: 512
    14 <212> TYPE: DNA
    15 <213> ORGANISM: Zea mays
    16 <220> FEATURE:
    17 <221> NAME/KEY: unsure
    18 <222> LOCATION: (368)
    19 <223> OTHER INFORMATION: n=a,c,g or t
    20 <220> FEATURE:
    21 <221> NAME/KEY: unsure
    22 <222> LOCATION: (387)
    23 <223> OTHER INFORMATION: n=a,c,g or t
    24 <220> FEATURE:
    25 <221> NAME/KEY: unsure
    26 <222> LOCATION: (405)
    27 <223> OTHER INFORMATION: n=a,c,g or t
    28 <220> FEATURE:
    29 <221> NAME/KEY: unsure
    30 <222> LOCATION: (408)
    31 <223> OTHER INFORMATION: n=a,c,g or t
    32 <220> FEATURE:
    33 <221> NAME/KEY: unsure
    34 <222> LOCATION: (445)
    35 <223> OTHER INFORMATION: n=a,c,q or t
    36 <220> FEATURE:
    37 <221> NAME/KEY: unsure
    38 <222> LOCATION: (447)
    39 <223> OTHER INFORMATION: n=a,c,g or t
    40 <220> FEATURE:
    41 <221> NAME/KEY: unsure
    42 <222> LOCATION: (453)
    43 <223> OTHER INFORMATION: n=a,c,q or t
    44 <220> FEATURE:
```

Input Set : N:\Crf3\Refhold\I890811A.raw
Output Set: N:\CRF3\06242002\I890811A.raw

D

06/24/2002

TIME: 17:40:08

```
45 <221> NAME/KEY: unsure
46 <222> LOCATION: (462)
47 <223> OTHER INFORMATION: n=a,c,g or t
48 <220> FEATURE:
49 <221> NAME/KEY: unsure
50 <222> LOCATION: (489)..(491)
51 <223> OTHER INFORMATION: n=a,c,q or t
52 <220> FEATURE:
53 <221> NAME/KEY: unsure
54 <222> LOCATION: (500)
55 <223> OTHER INFORMATION: n=a,c,g or t
56 <400> SEQUENCE: 1
57
         ctataattgg cgcaaatatg gacagaagca tgtcaaggga agtgaaaatc ctagaagtta 60
58
         ttacaaqtqc actcatccta attqtqaaqt taaaaaqcta ttaqaqcgtt cgcttgatgg 120
59
         tcaqattact qaaqttqttt ataaaggqca tcataatcat cccaagcccc aaccaaatag 180
60
        aaggttaget getggtgeag tteetteaag ceaggetgaa gaaagataeg atggtgtgge 240
         acctattgaa gacaaacctt caaatattta ttccaacctc tgtaaccaag cacattcagc 300
61
62
         tggcatggtt gataatgttc cgggtccagc aagtgatgat gatgttgatg ctggaggtgg 360
63
       aagacconac cetgggggga tgactonaat gatgatgatg acttnggnet caaaaacgca 420
       aggaaaatgg aatctgccgg gtatncnatg conggotttg antggggtaa accaaatccc 480
65
        ggagccccnn nttccttttn aaaaactgtt tt
                                                                            512
67 <210> SEQ ID NO: 2
68 <211> LENGTH: 170
69 <212> TYPE: PRT
70 <213> ORGANISM: Zea mays
71 <220> FEATURE:
72 <221> NAME/KEY: unsure
73 <222> LOCATION: (123)
74 <223> OTHER INFORMATION: Xaa = ANY AMINO ACID
75 <220> FEATURE:
76 <221> NAME/KEY: unsure
77 <222> LOCATION: (129)
78 <223> OTHER INFORMATION: Xaa = ANY AMINO ACID
79 <220> FEATURE:
80 <221> NAME/KEY: unsure
81 <222> LOCATION: (135)..(136)
82 <223> OTHER INFORMATION: Xaa = ANY AMINO ACID
83 <220> FEATURE:
84 <221> NAME/KEY: unsure
85 <222> LOCATION: (148)..(149)
86 <223> OTHER INFORMATION: Xaa = ANY AMINO ACID
87 <220> FEATURE:
88 <221> NAME/KEY: unsure
89 <222> LOCATION: (151)
90 <223> OTHER INFORMATION: Xaa = ANY AMINO ACID
91 <220> FEATURE:
92 <221> NAME/KEY: unsure
```

93 <222> LOCATION: (154)

94 <223> OTHER INFORMATION: Xaa = ANY AMINO ACID

06/24/2002

 RAW SEQU
 LISTING
 D
 06/24/2002

 PATENT APPLICATION:
 US/09/890,811A
 TIME: 17:40:08

Input Set : N:\Crf3\Refhold\I890811A.raw Output Set: N:\CRF3\06242002\I890811A.raw

```
95 <220> FEATURE:
    96 <221> NAME/KEY: unsure
    97 <222> LOCATION: (163)..(164)
    98 <223> OTHER INFORMATION: Xaa = ANY AMINO ACID
    99 <220> FEATURE:
    100 <221> NAME/KEY: unsure
    101 <222> LOCATION: (167)
    102 <223> OTHER INFORMATION: Xaa = ANY AMINO ACID
    103 <400> SEQUENCE: 2
            Tyr Asn Trp Arg Lys Tyr Gly Gln Lys His Val Lys Gly Ser Glu Asn
            Pro Arg Ser Tyr Tyr Lys Cys Thr His Pro Asn Cys Glu Val Lys Lys
                                        25
    108
            Leu Leu Glu Arg Ser Leu Asp Gly Gln Ile Thr Glu Val Val Tyr Lys
    109
                                     40
                                                       45
            Gly His His Asn His Pro Lys Pro Gln Pro Asn Arg Arg Leu Ala Ala
    110
    111
              50
                                 55
                                                   60
   112
            Gly Ala Val Pro Ser Ser Gln Ala Glu Glu Arg Tyr Asp Gly Val Ala
    113
            65
                              70
                                               75
    114
            Pro Ile Glu Asp Lys Pro Ser Asn Ile Tyr Ser Asn Leu Cys Asn Gln
                           85 90
    115
         Ala His Ser Ala Gly Met Val Asp Asn Val Pro Gly Pro Ala Ser Asp
    116
   117
                    100 105 110
W--> 118 Asp Asp Val Asp Ala Gly Gly Gly Arg Pro Xaa Pro Gly Gly Met Thr
    119
            115
                                 120 125
W-->, 120
            Xaa Met Met Met Thr Xaa Xaa Ser Lys Thr Gln Gly Lys Trp Asn
N L 121
                                135
                                                140
            Leu Pro Gly Xaa Xaa Cys Xaa Ala Leu Xaa Gly Val Asn Gln Ile Pro
  -> 122
  123
            145
                            150 155
W--> 124
            Glu Pro Xaa Xaa Pro Phe Xaa Lys Leu Phe
    125
                         165
    127 <210> SEQ ID NO: 3
    128 <211> LENGTH: 717
    129 <212> TYPE: DNA
    130 <213> ORGANISM: Zea mays
    131 <220> FEATURE:
    132 <221> NAME/KEY: unsure
    133 <222> LOCATION: (11)
    134 <223> OTHER INFORMATION: n=a,c,g or t
    135 <220> FEATURE:
    136 <221> NAME/KEY: unsure
    137 <222> LOCATION: (15)
    138 <223> OTHER INFORMATION: n=a,c,q or t
    139 <220> FEATURE:
    140 <221> NAME/KEY: unsure
    141 <222> LOCATION: (610)
    142 <223> OTHER INFORMATION: n=a,c,q or t
    143 <220> FEATURE:
    144 <221> NAME/KEY: unsure
```

RAW SEQU LISTING PATENT APPLICATION: US/09/890,811A D 06/24/2002 TIME: 17:40:08

Input Set : N:\Crf3\Refhold\I890811A.raw
Output Set: N:\CRF3\06242002\I890811A.raw

```
145 <222> LOCATION: (640)
    146 <223> OTHER INFORMATION: n=a,c,q or t
    147 <220> FEATURE:
    148 <221> NAME/KEY: unsure
    149 <222> LOCATION: (653)
    150 <223> OTHER INFORMATION: n=a,c,q or t
    151 <220> FEATURE:
    152 <221> NAME/KEY: unsure
    153 <222> LOCATION: (680)
    154 <223> OTHER INFORMATION: n=a,c,q or t
    155 <220> FEATURE:
    156 <221> NAME/KEY: unsure
    157 <222> LOCATION: (692)
    158 <223> OTHER INFORMATION: n=a,c,q or t
    159 <220> FEATURE:
    160 <221> NAME/KEY: unsure
    161 <222> LOCATION: (703)
    162 <223> OTHER INFORMATION: n=a,c,q or t
    163 <400> SEQUENCE: 3
₩<del>1</del>U> 164
              gacgcacccc ntctnttctc tececetete gtetegteca gtegtecece tetececeae 60
    165
              tetacceage tgecetgete tgegtegete gecatggegt cetecaeggg gagettggag 120
    166
              cacggggggt tcacgttcac gccgccgccc ttcatcacct ccttcaccga gctgctctcc 180
    167
              ggcgcagggg acatgctagg agccggcqcc qatcaggagc ggtcgtcqcc gaggggctg 240
    168
              ttccaccgcg gcgccagggg cgtgcccaag ttcaagtcgg cgcagcctcc cagcctgccc 300
    169
              atotogeoge egeccatgte geetteetee tacttegeea teeggeegg geteageece 360
    170
              geogagetge tegactegee egtectgete cactegteet ccaacateet ggegteteec 420
    171
              accactggcg ccatcccggc gcagaggttc gactggaaga aggccgccga cctgatcgcg 480
    172
              totcagtotc agcaagacgg cgacagccgg gotgccqccg ccggottcga cqacttotcc 540
    173
              ttcacacggg caccttcaac gccgtgcgcg cgcacacgac gacgacgtcc ttaccttcat 600
   174
              gaagaagaan gtggagaggg ccctggccga cgggcgcatn aacgcaaaat cgngtacaaa 660
 > 175
              ggcgcggcac aaacaacccn aagccggttg tncacgcgcc ggnaacttaa ttccgga
    177 <210> SEQ ID NO: 4
    178 <211> LENGTH: 150
    179 <212> TYPE: PRT
    180 <213> ORGANISM: Zea mays
    181 <400> SEQUENCE: 4
    182
              Met Ala Ser Ser Thr Gly Ser Leu Glu His Gly Gly Phe Thr Phe Thr
    183
                1
                                                    1.0
                                                                        15
    184
              Pro Pro Pro Phe Ile Thr Ser Phe Thr Glu Leu Leu Ser Gly Ala Gly
    185
                            20
                                                25
                                                                    30
    186
              Asp Met Leu Gly Ala Gly Ala Asp Gln Glu Arg Ser Ser Pro Arg Gly
    187
                       35
                                            40
                                                                4.5
    188
              Leu Phe His Arg Gly Ala Arg Gly Val Pro Lys Phe Lys Ser Ala Gln
    189
                   50
                                        55
                                                            60
    190
              Pro Pro Ser Leu Pro Ile Ser Pro Pro Pro Met Ser Pro Ser Ser Tyr
    191
               65
                                    70
                                                        75
    192
              Phe Ala Ile Pro Pro Gly Leu Ser Pro Ala Glu Leu Leu Asp Ser Pro
    193
                                8.5
                                                    90
    194
              Val Leu Leu His Ser Ser Ser Asn Ile Leu Ala Ser Pro Thr Thr Gly
```

RAW SEQU LISTING D 06/24/2002 PATENT APPLICATION: US/09/890.811A TIME: 17:40:08

## Input Set: N:\Crf3\Refhold\I890811A.raw Output Set: N:\CRF3\06242002\I890811A.raw

```
195
                      100
                                          105
196
         Ala Ile Pro Ala Gln Arg Phe Asp Trp Lys Lys Ala Ala Asp Leu Ile
197
                                                          125
                  115
                                      120
198
         Ala Ser Gln Ser Gln Gln Asp Gly Asp Ser Arg Ala Ala Ala Gly
199
                                  135
                                                      140
200
         Phe Asp Asp Phe Ser Phe
201
         145
203 <210> SEQ ID NO: 5
204 <211> LENGTH: 1961
205 <212> TYPE: DNA
206 <213> ORGANISM: Oryza sativa
207 <400> SEQUENCE: 5
208
         agtegteteg ttetegtete egateactet ceteeteate ttegteacgg teteeteget
                                                                              60
209
          tegetagete gettgettge tggetgaget gtggtacget egecatggeg teetegaegg 120
210
          gggggttgga ccacgggttc acgttcacgc cgccgccgtt catcacgtcg ttcaccgage 180
211
          tgctgtcqqg ggqcggtggq qacctgctcq gcgccqqcqq tgaqqagcqc tcqccqaqqg
212
         ggttctccag aggcggagcg agggtgggcg gcggggtgcc caagttcaag tccgcgcagc 300
213
         egeogageet geogeteteg eegeogoogg tgtegeegte gteetactte geoateeege
214
         eggggeteag ecceaecgag etgetegact ecceqteet ecteagetee teccatatet 420
215
         tggcgttccc gaccaccggt gcaatccgg ctcagaggta cqactggaag gccagcgccg 480
216
         atoteatege ttoteageaa gatgacagee geggegactt etectteeae accaacteeg 540
217
         acgccatggc cgcgcaaccg gcctctttcc cttccttcaa ggagcaagag cagcaagtgg 600
218
         togaqtoqaq caaqaacqqc qccqccqccq cqtcqaqcaa caaqaqcqqc qqcqqqqa 660
219
         acaacaagct ggaggacggg tacaactgga ggaagtacgg gcagaagcag gtgaagggga 720
220
         gcgagaaccc gaggagctac tacaagtgca cctacaacgg ctgctccatg aagaagaagg
221
         tggagcgetc getegeegae ggeegeatea eccagategt etacaaggge geacacaace
222
         accocaagec getetecace geograacge etetteegge tecacegeeg eegeetgege 900
223
         cgacgacctc gcggcgccg gcgcgggcgc ggaccagtac tccgccgcga cgcccgagaa 960
224
         ctcctccgtc acgttcggcg acgacgaggc cgacaacgca tcgcaccgca gcgagggcga 1020
225
         cqagcccqaa gccaaqcgct qgaaaggagq atgctqacaa cqagqqcaqc tccqqcqqca 1080
226
         tgggcggcgg cgccggcggc aacccggtgc gcgagccgag gcttgtggtg cagacgctga 1140
227
         gcgacatcga catcctcgac aacggcttcc ggtggaggaa gtacggccag aaggtcgtca 1200
228
         agggcaaccc caacccaagg agctactaca agtqcacgac qqtqqqctqc ccgqtqcqga 1260
229
         agcacgtgga gcgggcgtcg cacgacacgc gcqccqtgat caccacctac gagggcaagc 1320
230
         acaaccacqa cgtcccqgta cggccgcggc ggcggcggcg gacgcgccc ggcgccggcg 1380
231
         tegectacgg etgggggga teegggeega eggacgtege egeegeecag eaggggeet 1440
232
         acaccetega gatgetecce aacceegeeg geetetaegg eggetaegge geeggegeeg 1500
233
         geggegeege gtteeegege accaaggaeg ageggggga egacetgtte gtegagtege 1560
234
         tectetgeta gtegageega geegageega getgagetgg geeceacate eccetgeteg 1620
235
         ccacgtggcg tattttcgcc tcgccgtata cgtacggccg tatagcgtac gtatacacgc 1680
236
         tegeaegeee tgeecaacae ggeaatacae acatacatae tetegtacae aegtagtage 1740
237
         atacatatac agtatagtag gtggtagtgg tagctagcta gggagtgaga tccaatttgt 1800
238
         tgattcgttq caggccactq ccacqtqqqc cacaccqqaa acaqtacacq cqtatacacc 1860
239
         acacttggga tacgcgtacg tacgcacatg tacacgtagt tttgtgcctt tgtaactgct 1920
240
         gagagacagg tcaaataaga ctgatgaatt tttcatttct t
                                                                            1961
242 <210> SEQ ID NO: 6
243 <211> LENGTH: 488
244 <212> TYPE: PRT
245 <213> ORGANISM: Oryza sativa
```

RAW SEQUE LISTING ERROR SUMMARY PATENT APPLICATION: US/09/890,811A

D 06/24/2002 TIME: 17:40:09

Input Set : N:\Crf3\Refhold\I890811A.raw
Output Set: N:\CRF3\06242002\I890811A.raw

## Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <2233 fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 368,387,405,408,445,447,453,462,489,490,491,500

Seq#:2; Xaa Pos. 123,129,135,136,148,149,151,154,163,164,167

Seq#:3; N Pos. 11,15,610,640,653,680,692,703

## Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:14; Line(s) 743